

USE OF GENE PRODUCT OF ADENOVIRUS EARLY REGION 4 ORF-6  
TO INHIBIT REPAIR OF DOUBLE-STRAND BREAKS IN DNA

Abstract of the Disclosure

5 The present invention provides a modified adenovirus  
comprising genomic adenoviral DNA which has been  
modified so that (i) the only gene product of the early  
region (E4) that is expressed is open reading frame 6  
(ORF-6), (ii) neither the gene product of the E1A region  
nor the gene product of the E1B region is expressed, and  
10 (iii) no other early or late gene products are  
expressed. The present invention also provides methods  
of inhibiting repair of breaks in double-stranded DNA in  
a cell, preventing concatamerization of linear wild-type  
adenoviral DNA, inhibiting V(D)J recombination of  
15 nucleic acid sequences encoding immunoglobulins,  
preventing apoptosis, and preventing and treating  
cancer.